Motor Vehicle Volume Studies

These studies are made to obtain information on the number, direction and variations in the volume of motor vehicles passing through an intersection or along a major route.

Conducting Studies

Planning

One MP can observe and record information on 1,000 vehicles per hour along a roadway. Two MPs can observe and record information on a normal two-way intersection. More MPs will be necessary if volume exceeds 1,500 vehicles per hour.

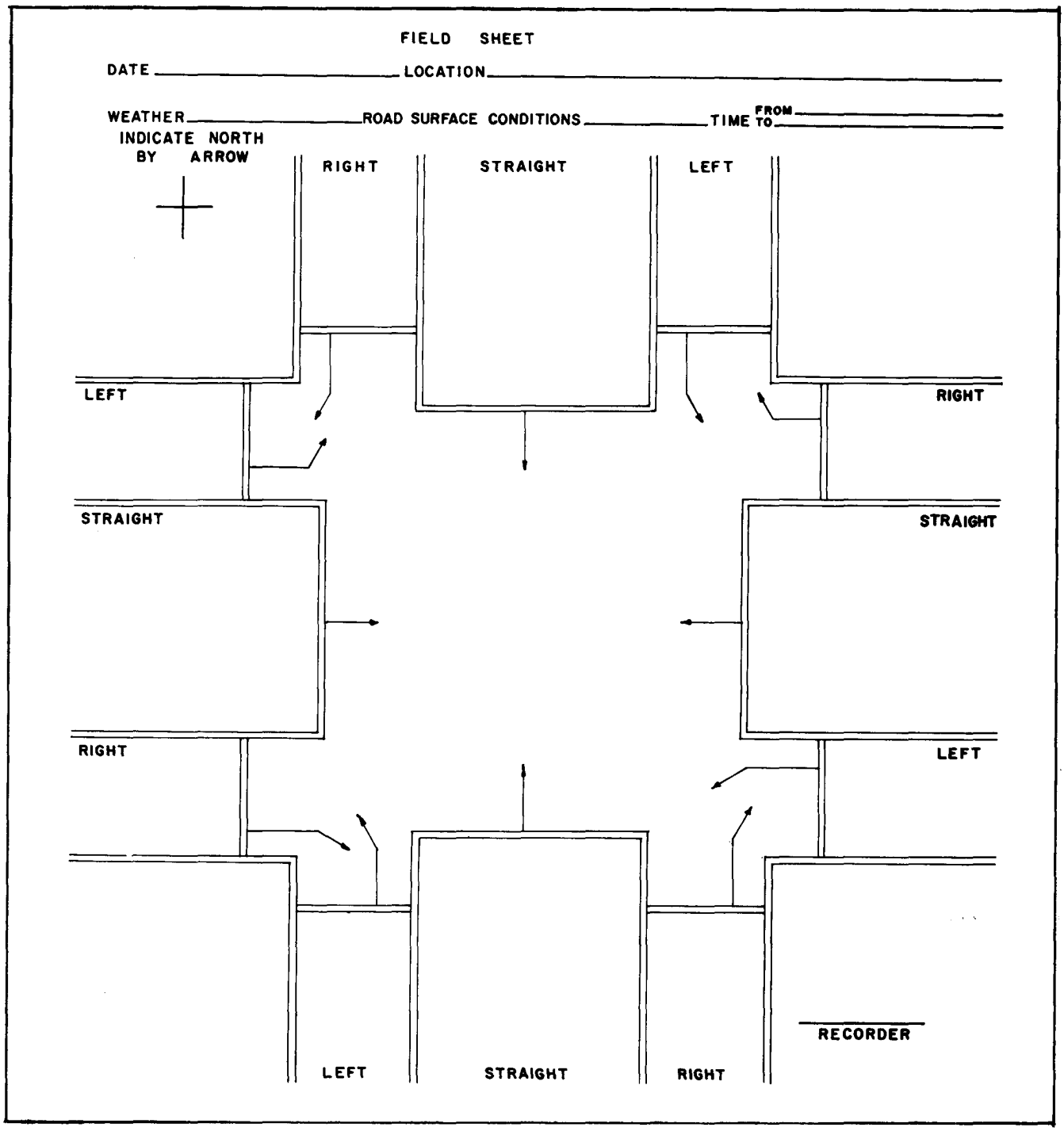
Equipment necessary to conduct this study are a wristwatch, field sheets, summary sheets and counting equipment.

Vehicle counts are usually made to cover 10-,12-, or 24-hour periods, They should be made on weekdays to obtain a normal volume count. The count should begin a half hour prior to peak traffic periods and end a half hour after each peak period. If traffic volume is consistently high during the day and night, an 18-hour count should be made.

The study should be conducted in good weather.

Recording

MPs conducting the study should be positioned so they have an unobstructed view of the area. If the



Motor Vehicle Volume Field Sheet

count is made at an intersection, MPs should be on diagonally opposite corners.

The field sheet (sample above) is used to record data on an intersection. The number and action of each vehicle entering the intersection is recorded as appropriate. A new sheet is used every one-half hour (every quarter-hour if volume is very heavy).

The summary sheet (sample on page 145) is used to compile data recorded on the field sheets.

LOCATION_____ DATE_____

WEATHER _____ROAD SURFACE CONDITION_____

Time starts M	From north on _____St.			From south on _____St.			From west on _____St.			From east on _____St.			Half hour total
	L	S	R	L	S	R	L	S	R	L	S	R	
0700–0730													
0730–0800													
0800–0830													
0830–0900													
0900–0930													
0930–1000													
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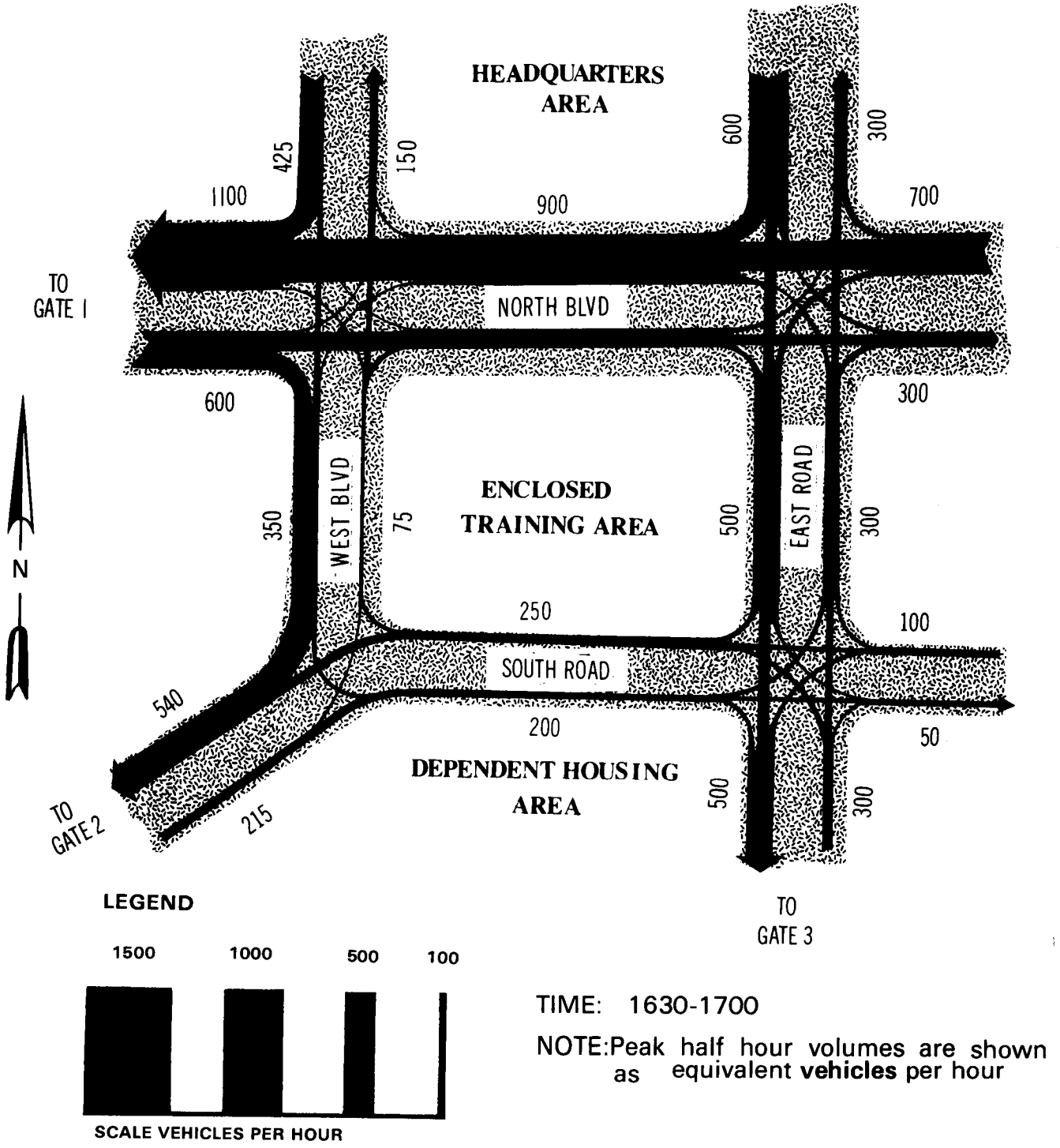
2200–2230													
2230–2300													
2300–2330													
2330–2400													
Total													
Total													

Compiled by_____

R—Right turn.
L—Left turn.
S—Straight ahead.

Motor Vehicle Volume Summary Sheet



Route Volume Graph

The graphic summary sheet (page 147) is used to indicate the number of vehicles counted and their directional movements during a desired time period.

The route volume graph above is another method of graphically indicating information obtained in this study. The thickness of the bands are related to the traffic volume during a specific period.

LOCATION _____ DATE _____

TIME _____ HOURS FROM

_____ TO _____

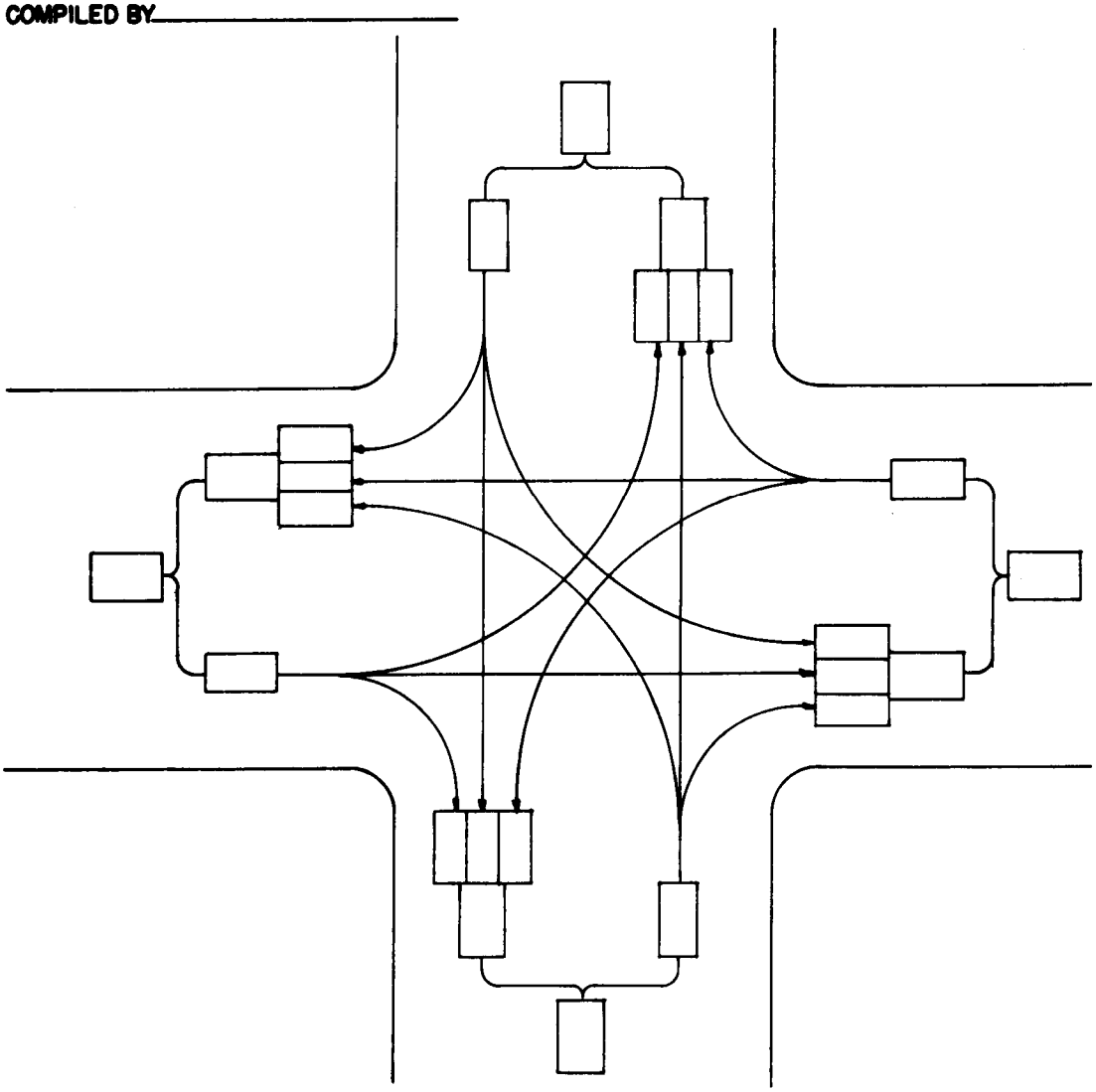
_____ TO _____

WEATHER _____

ROAD SURFACE CONDITION _____

COMPILED BY _____

INDICATE NORTH BY ARROW



REMARKS & RECOMMENDATIONS _____

Vehicle Volume Graphic Summary Sheet

Uses

The information gathered in a motor vehicle count may be used to:

Study traffic control devices and their effectiveness. The study may justify the existence or need for fixed-time or traffic-actuated signals, the need for stop signs, speed zones, pavement markings, or Military Police on traffic control duty at various locations and times.

Study and evaluate the number of accidents based on volume and directional movement. Generally, special controls are needed if 300 out of 1,000 vehicles make a left turn at an intersection. The need for street lighting and signals can be considered by comparing day and night traffic volume to day and night accident frequency.

Study future needs such as through streets, secondary roads or roadway improvements.